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The Syntax of Appositive Relativization: On Specifying Coordination, False Free Relatives, and Promotion

Mark de Vries

Appositive relative clauses differ in some essential respects from restrictive relative clauses. I argue that appositive relatives and appositions can be put together as a third class of coordination denoting specification. Thus, an appositive relative is a specifying conjunct to the visible antecedent. It is a semifree relative with a pronominal head that is normally empty. Therefore, its internal syntax is equivalent to that of restrictive relatives; hence, there is one syntax for both types of relative clauses. In essence, it is the context of specifying coordination that accounts for the different behavior of appositive relatives. In the light of this analysis, the properties of appositive relatives (as opposed to restrictive relatives) are systematically reviewed.

Keywords: appositive, nonrestrictive, relative clause, apposition, coordination, free relative, syntax

1 Introduction

A relative clause can be semantically restrictive, appositive (nonrestrictive), or maximalizing. An illustration is given in (1).

(1) a. (I spoke to) the lecturers that failed the test on didactics. (restrictive)
b. (I spoke to) the lecturers, who failed the test on didactics. (appositive)
c. (I spilled) the coffee that there was in the pot. (maximalizing)

In (1a), the subject spoke only to the group of lecturers who failed the test; the lecturers who passed the test were not addressed. In (1b), the subject spoke to all lecturers in the domain of discourse, who (by the way) all failed the test. In the maximalizing relative construction (1c)—a substance degree relative, to be precise—the whole amount of coffee in the pot was spilled; there is no contrast with other coffee, yet the relative clause is essential for the meaning of the sentence. This third type of relative is discussed in Carlson 1977 and Grosu and Landman 1998.

Here, I want to deal with the syntactic distinction between the appositive and restrictive relative constructions. Although there are obvious similarities, there are also substantial differences

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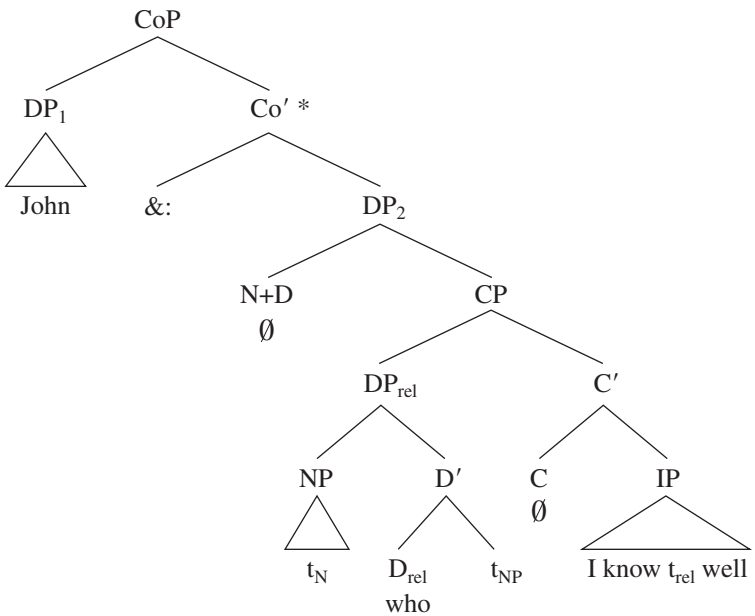
between the two types, as is well known. Therefore, appositive relatives must be analyzed differently from restrictive relatives. The literature offers a wealth of divergent proposals to distinguish them; one of my goals here is to bring the various relevant insights together.

I argue that appositive relatives can be treated on a par with (nonrestrictive) appositions. Both are conjuncts to the antecedent or ''head (NP),'' whose meaning they specify. Furthermore, I show that within this conjunct, the relative is structured as a (semi)free relative with an empty pronominal head. Finally, I argue that the syntactic derivation of all relative constructions involves ''raising'' (or ''promotion''); however, in the case of appositive relatives, it is not the visible antecedent—the first part of the appositional construction—that is promoted, but an abstract NP (within the second conjunct), as in free relatives. A sketch of the structure that follows from these ideas is provided in (2), where *&:* represents the head of a specifying coordination phrase and D_{rel} a relative pronoun.

(2) *Structure of appositive relative clause (e.g.,* John, who I know well*)*



Thus, the analysis combines several aspects of seemingly incompatible ideas put forward in the literature, and it explains many of the properties of appositive relatives to be reviewed below.

The claims concerning specifying coordination, (semi)free relatives, and raising, as well as the details of the structure in (2), will be substantiated extensively in the remainder of this article. Section 2 discusses the structural position of appositive relatives. Section 3 introduces a coordination analysis of apposition. Section 4 shows that the internal structure of an appositive relative is similar to that of a (semi)free relative and presents a derivation in terms of raising. Section 5 reviews and explains the properties of appositive (as opposed to restrictive) relatives. Section 6 contains some crosslinguistic considerations. Finally, section 7 is the conclusion.

2 The Structural Position of Appositive Relatives

2.1 Orphanage versus Constituency

From Ross 1967 on, one may distinguish a line of thought concerning appositive relatives called the Main Clause Hypothesis (MCH). Ross argues that appositive relatives are main clauses. At D(eep)-Structure, they are coordinated to the matrix clause. Some transformations must then turn the clause into a parenthetical, relative clause, which surfaces in a position adjacent to the antecedent. This approach is taken over by Thompson (1971).[1] The MCH is formalized by Emonds (1979) and defended also by Stuurman (1983).

The MCH competes with the Subordinate Clause Hypothesis (SCH), which states that an appositive relative is a subordinate clause embedded within the maximal projection of the antecedent. Therefore, the antecedent and the appositive relative form a constituent. The difference with restrictive relatives can be represented by the attachment of an appositive relative to a higher level within the noun phrase. As far as I know, Jackendoff (1977:chap. 7) was the first to explicitly make this argument; the SCH was later defended against the MCH by Perzanowski (1980). In a binary-branching grammar, Jackendoff's analysis translates straightforwardly into right-adjunction. For instance, in Smits 1988:pt. II, appositive relatives are right-adjoined to the NP level. In present-day syntactic theory, ARCs may be viewed as adjoined to the DP level (see, e.g., Toribio 1992). As I see it, these are all variants of the SCH.

I will reserve the term *MCH* for the Ross/Emonds-type approach, and *SCH* for Jackendoff's and its successors. In a broader perspective, the controversy concerns the difference between *orphanage* and *constituency*. The former notion (due to Haegeman (1991), I believe) expresses the idea that the antecedent and the appositive relative are generated separately; the latter means that they form a syntactic constituent.

First, consider orphanage. Importantly, it can be ''radical'' or ''nonradical.'' *Radical orphanage* means that an appositive relative is not even part of the syntactic structure of the matrix clause. For instance, Safir (1986) argues that there is a level LF′, beyond LF, where an appositive relative is attached next to the antecedent. Likewise, Fabb (1990) and Canac-Marquis and Tremblay (1998) claim that an appositive relative is attached at a ''discourse'' level.[2] *Nonradical orphanage* means that an appositive relative is syntactically present, but it is not generated together with the antecedent. The MCH is such an account. An appositive relative is generated as a clause conjoined to the main clause; then the material intervening between the antecedent and the appositive relative is extraposed to the right. A theory related to the MCH is presented in McCawley 1982. McCawley claims that constituents can be discontinuous. If precedence and dominance are independent relations, then there could be transformations that affect only the order of the constituents, leaving their phrase-structurally encoded relations untouched. This gives

[1] Thompson applies the analysis to restrictive relatives, too. (In the late 1960s, a few more authors claimed a deep-structure conjunction analysis for restrictive relatives; see Stockwell, Schachter, and Partee 1973:440 for the references.) This unification has found no continuation in the literature, since it leaves all the differences between the two types unexplained.

[2] They do not specify exactly what this means, but a Discourse Representation Theory type of approach as in Sells 1985 comes to mind; see also point I of section 5.1.

trees with crossing branches. Therefore, an appositive relative (or a parenthetical phrase in general) can be generated as attached to the main clause (as in the MCH; however, McCawley does not speak of coordination) and put next to the antecedent by Parenthetical Placement, a simple order-changing transformation. Finally, Smits (1988) and Bianchi (1999), although in general proponents of the constituency account, argue that there is a subset of appositive relatives that is generated in an extraposed position.[3]

The SCH is the prototypical constituency account, but there are other possibilities. Some theories attach an appositive relative by means of complementation. For instance, Smith (1964) generates an appositive relative as the complement of Det (the determiner belonging to the antecedent), then moving it by NP-internal extraposition to the right of the antecedent;[4] Platzack (1997, 2000) generates an appositive relative as the complement of an empty N, of which the specifier is the antecedent DP; and Lipták (1998) takes an appositive relative to be a small clause complement, which is a predicate of the antecedent.[5] A third possibility is constituent coordination of the appositive relative to its antecedent. This is proposed in different ways by Sturm (1986), Koster (1995, 2000), and myself (De Vries 2002). It is also one of the major claims of this article, as I will discuss at length below.

Finally, there are mixed approaches to appositive relativization. These generate an appositive relative as a constituent with the antecedent, but detach the two elements at LF. In different ways, this is proposed by Demirdache (1991), Kayne (1994), Bianchi (1999), and Del Gobbo (2003). Demirdache and Del Gobbo initially generate the appositive relative using right-adjunction. Then the appositive relative is shifted to the matrix level; therefore, it is interpreted as a main clause.[6] According to Kayne and Bianchi, an appositive relative is a complement of D—the external determiner—initially, as is any relative clause (see section 4.2 for a short discussion of the raising analysis). At LF, the appositive relative is moved to Spec,DP in order to get it out of the scope of D (see section 2.2); it remains a subordinate clause.[7]

The different approaches to appositive relativization are summarized in table 1, in which they are classified on the basis of three general criteria: (a) the syntactic connection between the relative clause and the antecedent, (b) the clause type of the relative (main or subordinate), and (c) the syntactic status of the appositive relative (paratactic or not).[8]

[3] Notably, the two authors define this subject differently. For Smits, it contains extraposed appositive relatives that are continuative or have a split antecedent. He does not specify the position of these relatives. For Bianchi, it includes appositive relatives with a nonnominal antecedent (see point K of section 5.2 for some examples). She assumes, without much clarification, that these are base-generated separately.

[4] Smith analyzes restrictive and appositive relatives similarly. This unification is problematic (see also section 2.2), but in a way the ''D-Complement Hypothesis'' has been taken up by Kayne (1994) and others.

[5] Notice, however, that Demirdache (1991) argues explicitly against the idea that an appositive relative is a predicate of the antecedent. Furthermore, a paraphrase with a copula is unacceptable, for example, *this book (*is), which I studied last week*.

[6] Demirdache applies LF movement; Del Gobbo proposes a ''Restructuring rule,'' which ''can undo hierarchical structure (it transforms a nominal modifier into a matrix sentence attached to a Text node), but not linear order'' (p. 185).

[7] These authors propose the same structure for prenominal relatives. In that case, the movement is overt. This is a problem, for they are interpreted restrictively. Borsley (1997) provides more arguments against Kayne's approach.

[8] The first two criteria are discussed directly below and in the next subsection. The third criterion will be explored in section 3.

Table 1
Theories on appositive relativization

Syntactic connection			Main clause	Parataxis	Authors
Constituency	Constituent coordination		−	+	Sturm (1986) Koster (1995, 2000) De Vries (2000, 2002)
	Complementation		−	−	Smith (1964) Platzack (1997, 2000) Lipták (1998)
	Right-adjunction (SCH)		−	−	Jackendoff (1977) Perzanowski (1980) Smits (1988) [type A][a] Toribio (1992)
(Mixed)	Initial constituency, LF detachment		−/+(SEM)	−	Kayne (1994) Bianchi (1999) [type i][b] Demirdache (1991) Del Gobbo (2003)
Orphanage	Nonradical	Extraposition	−	−	Smits (1988) [type B][c] Bianchi (1999) [type ii][d]
		Discont. constituent	−	−	McCawley (1982)
		Coordination (MCH)	+	+	Ross (1967) Thompson (1971) Emonds (1979) Stuurman (1983)
	Radical		+/−	+	Safir (1986) Fabb (1990) Canac-Marquis and Tremblay (1998)

[a] Regular appositive relatives
[b] Extraposed appositive relatives with a continuative meaning or a split antecedent
[c] Regular appositive relatives
[d] Appositive relatives with a nonnominal antecedent

The orphanage hypothesis was originally designed to explain the ''main clause character'' of appositive relatives. However, it also has clear disadvantages. In general, orphanage does not explain the relations between an appositive relative and its antecedent. Here, I will briefly point out some important problems; see Perzanowski 1980 and Borsley 1992 for more detailed comments.

First, it must be stipulated that an appositive relative surfaces adjacent to the antecedent; this contrasts with the free position of parentheses.[9] Of course, appositive relatives can often be extraposed, but that is a different matter (see De Vries 2002:chap. 7 and the references there). Second, the MCH is strange from the perspective of many languages. For instance, Dutch and German main clauses display verb-second, whereas subordinate clauses are completely verb-final. Relative clauses, including appositive relatives, are clearly subordinate clauses in this respect. To

[9] Emonds (1979) and Stuurman (1983) claim that this follows independently from the rule of *wh*-interpretation that is needed for restrictive relatives too (hence ''appositive relatives have no properties''). However, this cannot be correct. The adjacency requirement that is implicit in their formulation of ''*wh*-interpretation'' is completely superfluous for restrictive relatives. If what they mean boils down to the idea that a relative pronoun is an anaphor (an idea that is not supported here), its reference should be established by the binding theory, not by some additional rule of *wh*-interpretation in relative clauses. (Furthermore, the semantics of appositive and restrictive relatives differ in general.)

put it more generally: how does the MCH make sure that appositive relatives acquire the characteristics of subordinate clauses and get rid of typical main clause properties (e.g., the possibility of expressing imperative or interrogative force)? Third, as concerns radical orphanage, if an appositive relative is attached at LF′ (or some equivalent level), how can it be pronounced at all, given the regular Y-model of grammar? Fourth, consider nonradical orphanage, where an appositive relative is present in syntax. This analysis can be excluded simply on the basis of the verb-second property in languages like Dutch (see also Smits 1988:114). This is shown in (3). (Similar data can be adduced for appositions; see section 3.2.)

(3) a. Annie, die viool speelt, *heeft* een nieuwe strijkstok gekocht.
Annie who violin plays has a new bow bought
'Annie, who plays the violin, bought a new bow.'
b. *Annie *heeft*, die viool speelt, een nieuwe strijkstok gekocht.

There can only be one constituent in front of the finite verb, *heeft*. However, in a nonradical orphanage analysis such as the MCH, the antecedent and the appositive relative are two separate constituents; therefore, (3a) cannot be derived. Notice also that (3b), where the antecedent and the appositive relative are separated, is excluded.

I conclude that there is substantial evidence against the orphanage hypothesis. In other words: an antecedent and an appositive relative must form a constituent. Therefore, let us consider the constituency approach in more detail.

2.2 Scope and the Subordinate Clause Hypothesis

One of the defining differences between restrictive and appositive relative clauses (ARCs and RRCs) concerns the scope of the determiner or quantifier that belongs to the antecedent (see also, e.g., Jackendoff 1977). In (4a), *all the* takes scope over both the noun and the restrictive relative; this implies that there is a group of lecturers that did not pass the test. In (4b), *all the* takes scope over the noun, but not over the relative clause; thus, there is no test-failing lecturer.

(4) a. all the lecturers that passed the test (RRC)
b. all the lecturers, who passed the test (ARC)

On the assumption that the scope of a determiner D is determined by its c-command domain, we must conclude that a restrictive relative is attached below (or as) the sister of D, but an ARC is not.

Example (5) is an additional illustration from Dutch, where a quantified NP can be elliptic in certain contexts, such as a coordination structure. The meaning of the second conjunct is paraphrased in (5bi).

(5) a. Jij hebt twee violen, die trouwens al heel oud zijn, en ik heb er
you have two violins which besides already very old are and I have there
drie [*e*].
three

b. i. = . . . & I have three violins.
ii. ≠ . . . & I have three violins, which are already very old, by the way.

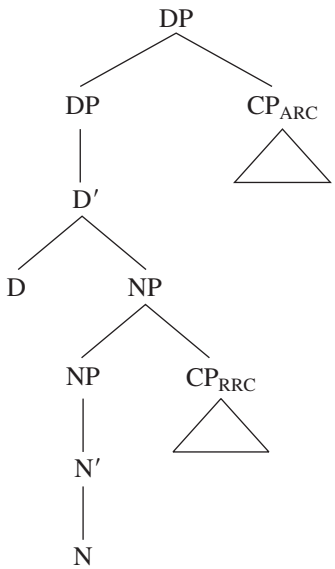
Given that the paraphrase indicated in (5bii) is wrong, the elided constituent following the quantifier cannot contain N *and* the appositive relative (see also Smits 1988:112–113). Therefore, an appositive relative must be outside the scope of the quantifier; hence, it must be attached at a level higher than N′. Notice that a restrictive relative construction gives the reverse pattern, as shown in (6).

(6) a. Jij hebt twee violen die in Cremona vervaardigd zijn, en ik heb er
you have two violins that in Cremona manufactured are and I have there
drie [*e*].
three
b. i. ≠ . . . & I have three violins.
ii. = . . . & I have three violins that were manufactured in Cremona.

Here, the second paraphrase is the correct one. Therefore, the restrictive relative must be included within the constituent following the quantifier.

Thus, these basic scope facts imply that the structure of restrictive and appositive relative constructions cannot be completely the same. Still, a common view within the constituency approach is that the difference should be minimal. In the present version of the SCH/adjunction analysis (e.g., Toribio 1992; but see also Demirdache 1991 and Del Gobbo 2003 regarding the overt syntax), a restrictive relative is right-adjoined to NP, whereas an appositive relative is right-adjoined to DP; see (7a). The internal structure of a relative CP is usually assumed to be (7b).

(7) a.



b. [$_{CP_{RRC/ARC}}$ OP/RP$_i$ [$_{C'}$ (C) [$_{IP}$ . . . t$_i$ . . .]]]

Here OP/RP is a relative operator or pronoun. It is Ā-moved to Spec,CP and it is coindexed with the antecedent.

This analysis leaves several matters unexplained. In general, a right-adjunction approach may be problematic (apart from antisymmetry considerations), because it raises the following questions:

(8) a. Why must (appositive) relative clauses be right-adjoined, not left-adjoined?
b. Why is leftward movement of an (appositive) relative clause excluded?

Furthermore, since appositive and restrictive relatives are configured similarly, it is unclear why there are many differences in behavior between the two types (see section 5 for details).[10] For instance:

(9) a. Why is the categorial status of an appositive relative free, whereas restrictive relatives must be connected to an NP?
b. Why are the dependencies between the antecedent and the relative gap, which have been taken to constitute evidence for a raising analysis of restrictive relatives and maximalizers, absent in appositive relative constructions?
c. Why is a lexically zero Comp domain excluded in an appositive relative, even in languages where this is possible in restrictive relatives?
d. Why can appositive relative constructions (like free relatives) be both externally and internally headed in some special cases (in languages with a postnominal relative construction, such as Dutch and English), whereas this is impossible for restrictive relative constructions?
e. Why is the anaphoric dependency of OP/RP on the antecedent in an appositive relative of a different type than in a restrictive relative (see Demirdache 1991, Sells 1985, Del Gobbo 2003)?

I will show that these and other questions can be answered in a coordination variant of the constituency approach.[11]

2.3 Constituency and Coordination

I have argued that (a) an appositive relative and its antecedent must form a constituent in order to prevent orphanage, (b) the analysis must reflect the basic scope difference between restrictive and appositive relatives with regard to the determiner, and (c) there must be an essential syntactic distinction between the restrictive and the appositive relative constructions.

[10] Note that the so-called mixed approaches in table 1 will have problems in dealing with several of the issues mentioned in (8) and (9), as well.

[11] The issues are discussed in a more coherent way in the course of the argument; but in particular, see sections 3.1 and 4.1 for the questions in (8), point K of section 5.2 for (9a), points G and H of section 5.1 for (9b), point M of section 5.2 for (9c), point N of section 5.2 for (9d), and points J and L of section 5.2 for (9e).

My proposal, which I dub the *CFR* analysis, is as follows.[12] It consists of three essential elements:

(10) *The CFR analysis of appositive relativization*
  a. An appositive relative is ***c****oordinated* to the antecedent.
  b. The appositive relative is a DP, hence a kind of ***f****ree relative*.
  c. There is ***r****aising* within the appositive relative.

The syntactic structure is repeated from (2) for ease of reference.

(11) $[_{CoP}[_{DP_1} \ldots]$ &: $[_{DP_2}[_{D}\ N+D]\ [_{CP}[_{DP_{rel}}\ [_{NP}\ t_N]\ D_{rel}\ t_{NP}]_i \ldots\ldots\ t_i \ldots\ ]]]$
e.g. John Ø who I know well

The details of (11) and its consequences will be discussed systematically below.

Each of the ideas in (10) has been proposed before (albeit somewhat unspecifically), but the combination of the three is certainly new. Both Sturm (1986:chap. 7, sec. 7.9) and Koster (2000: 22) express the intuition that appositive relatives are coordinated to the antecedent.[13] Sturm does not extensively address the special nature of this conjunction. According to Koster, it denotes ''specification,'' which can also be used for appositions and extraposed constituents (for further discussion, see section 3). As for the internal structure of the second conjunct—the appositive relative—Koster assumes a traditional CP analysis (as in (7b)).

The idea that an appositive relative is a free relative has been suggested before, by Canac-Marquis and Tremblay (1998). They state that an appositive relative is a free relative that stands in apposition to the antecedent, like a regular apposition. Their analysis is basically a radical orphanage approach. They assume that appositive elements are ''unmerged objects,'' which are licensed at a discourse level. Therefore, the critique in section 2.1 applies to their proposal. Moreover, they do not discuss the internal structure of appositive relatives. In section 4.3, I will show that appositive relatives are not simply free relatives, but semifree relatives with a (usually) empty head.

Finally, consider the application of head raising (in the sense of Vergnaud (1974) and Kayne (1994); see further section 4) to appositive relatives, in addition to restrictive relatives. This generalization captures what Kayne (1994) and Bianchi (1999) aim at, too. However, it differs from their approach in a significant way: namely, in the coordination structure I propose, it is the empty head of the free relative that raises, whereas in Kayne's and Bianchi's approach the visible antecedent moves, leading to serious problems.

Since free relatives are a special type of restrictive relative (namely, those with a light or null antecedent), and specifying coordination exists independently from appositive relatives, it follows that appositive relatives do not exist as an independent type. Roughly speaking, the

[12] Earlier versions are proposed in De Vries 2000, 2002:chap. 6.

[13] See also Klein 1976, 1977. Koster's approach is exceptional in that he also treats restrictive relatives as conjuncts. He briefly suggests that the difference between restrictive and appositive relatives can then be captured by attaching them at different levels: NP and DP, respectively. As discussed for the SCH approach above, this accounts for the difference in scope of the determiner, but it leaves all other differences unexplained.

similarities between restrictive and appositive relatives follow from the (restrictive) relative part of the construction; the differences are caused by the way an appositive relative is attached to the syntactic context, namely, by means of specifying coordination. Therefore, although the MCH as such is untenable, Emonds (1979) may be right after all: ''appositive relatives have no properties,'' that is, no properties that cannot be independently derived.

3 A Coordination Analysis of Apposition

This section discusses hypothesis (10a) in some detail, that is, the coordination analysis of apposition. Section 3.1 elaborates on the concept of specification and shows why appositions in general can be treated as specifying conjuncts. Section 3.2 points out the similarities between appositions and appositive relatives as specifying conjuncts. Section 3.3 addresses the formal representation of coordination.

3.1 Apposition Involves Coordination

A nonrestrictive postnominal DP modifier is called an *apposition.*[14] Some examples are given in (12).

(12) a. John, *our boss*
b. a nice present: *a book by Golding*
c. Joep, *a nasty liar*

Several semantic types of appositions may be distinguished, such as equatives, exemplifications, or attributions (see Quirk et al. 1985:1308 for discussion). Depending on the exact semantic subtype, the connection between the two DPs can, cannot, or must be made explicit by a phrase like *that is (to say)*, *namely*, or *for example*. What all these types have in common is that the apposition *specifies* the first DP. (The technicalities of this notion are treated below.) Even in equatives it is the case that the second DP provides the hearer with further information about the first.

What is the syntactic status of appositions? I think they must be analyzed as coordinated constituents. Consider (13).

(13) a. Joop *and* Jaap (conjunction)
b. Joop *or* Jaap (disjunction)
c. the White House, *or* the house with the Oval Office (specification)

The mere fact that coordinators like *or* (Dutch: *of*, *of(te)wel*, *en wel*, etc.) can sometimes be used strongly suggests that the appositive construction is a kind of coordination. Quirk et al. (1985: 1301–1302) state, ''Apposition resembles coordination in that not only do coordinate constructions also involve the linking of units of the same rank, but the central coordinators *and* and *or* may themselves occasionally be used as explicit markers of apposition.'' Notice that if appositions

[14] According to the definition in Quirk et al. 1985:1300 ff., there are also *restrictive* appositions, such as complement clauses and prepositional phrases. These do not concern us here.

were simply right-hand adjuncts to a noun phrase, the existence of coordinative heads or phrases would be unexpected.[15] To sum up, the three main types of coordination are *conjunction*, *disjunction*, and *specification*.

The differences between the three types of coordination are determined by the coordinator. For instance, *and* implies that a coordinated definite DP denotes two different individuals, whereas specifying coordination gives just one individual. In terms of propositional logic, a conjunction of propositions is true only if both conjuncts are true; that is, the semantics involves set intersection. A disjunction is true if one or more of the conjuncts are true.[16] If individuals are coordinated, the semantics is much more complicated (see Link 1984). Specifying coordination can be indicated by a specifying phrase, but often the connection is phonologically empty (see below); it always triggers a comma and a low intonation on the second conjunct.

The concept of specifying coordination was first introduced by Kraak and Klooster (1968: chap. 11), as far as I know. Specification of A by B means that B adds information to A; A is specific or generic. By definition, specification is nonrestrictive. Syntactically, I take restriction to be represented by complementation, and specification—that is, (nonrestrictive) apposition—by coordination. Furthermore, specification is asymmetric: it is always the second conjunct that specifies the first. The rationale for this assumption is that in a discourse one can add information only to something that has already been mentioned; moreover, the extra information is set off phonologically by low intonation.

I will use the symbol *&:* to represent specifying coordination. The *&* indicates that it is a special instance of conjunction; the colon indicates the specifying part. The Dutch paraphrase *en wel* 'and namely' directly reflects this concept (but note that sometimes *oftewel* 'or namely' is more appropriate). Two examples from Kraak and Klooster 1968:260 are given in (14).

(14) a. Fik is een hond, en wel een poedel.
Fik is a dog namely a poodle
b. Jan begaf zich naar beneden, en wel naar de kelder.
Jan proceeded SE toward downstairs, and indeed to the basement
'Jan went downstairs, namely to the basement.'

Next, consider the phonological shape of coordinators. They can be overt, as in (13), or *asyndetic* (phonologically empty); see (15).

(15) a. Joop, Jaap *(and) Joep
b. Joop, Jaap *(or) Joep
c. the White House, the house with the Oval Office

[15] That is, unless the adjunct is comparable to sentences like *And then I had to go to work*, as a reviewer remarks. It can be argued that these ''additive coordination phrases'' are CoPs with an implied first pro conjunct (see, e.g., Skrabalova 2003). Therefore, we would have to analyze an apposition as a right-hand CoP adjunct to the antecedent. This does not seem plausible to me; it is more straightforward to eliminate right-adjunction and analyze the antecedent as the first conjunct itself.

[16] The term *conjunct* is somewhat confusing. It refers to one of the coordinated phrases, whether the coordination as a whole constitutes conjunction, disjunction, or something else.

In (15a–b), the asyndetic first conjunction (or disjunction) must be licensed by the presence of a final overt conjunction. This can be seen as an instance of backward deletion.[17] In the case of an asyndetic specifying conjunction (15c), there is no such demand. Therefore, I take the default interpretation of a real asyndetic conjunct to be specification.[18]

If appositions are (specifying) conjuncts, we predict that they bear the same Case as the phrase they are attached to.[19] This is correct; for example, compare the German sentences (16) and (17).

(16) Du kennst doch den Jan und den Peter?
you know yet the-ACC Jan and the-ACC Peter
'You know Jan and Peter, don't you?'

(17) Du kennst doch den Jan, meinen Cousin?
you know yet the-ACC Jan my-ACC cousin
'You know Jan, my cousin, don't you?'

Notice that in a right-adjunction approach to apposition, it would be unclear how the apposition gets (or checks) Case.

In this section, I have argued that appositions can be analyzed as specifying conjuncts, where specifying coordination is nonrestrictive and asymmetric. In the next section, I will compare appositive relatives with appositions and ''normal'' conjuncts.

3.2 Appositive Relatives as Specifying Conjuncts

It has been claimed that an apposition is a reduced (relative) clause (see, e.g., Delorme and Dougherty 1972, Halitsky 1974, Klein 1976, 1977). For instance, *Annie, our manager* is comparable to *Annie*, *who is our manager*. I share the intuition that appositive relatives and appositions are similar in certain respects. An appositive relative is nothing more than an extensive apposition (a view expressed in Doron 1994 as well; see also section 4). Since I have argued in the previous section that appositions involve specifying coordination, my hypothesis will be that an appositive relative is a specifying conjunct to its antecedent as well.

The coordination approach to apposition implies that the antecedent and the relative clause form a constituent. This is confirmed by the fact that the whole construction can be topicalized, in the same way as constructions with an apposition or normal conjunction. See, for example, the Dutch sentences in (18), where the finite verb (in italics) is always in second position in the main clause. The usual surface position of the object is indicated by an underscore.

[17] Other possible analyses are Co-to-Co head movement or a multiple specifier analysis of *n*-ary coordination. This is irrelevant for the argument here. See Progovac 1998 and De Vries 2005 for some discussion and further references.

[18] Nevertheless, there are some true instances of asyndetic conjunctions; see (i) and (ii), for example.

(i) Joop, Mien, everybody left.
(ii) Well, well.

This always has a particular stylistic effect. In (i), it indicates intensification; (ii) involves reduplication.

[19] Normally, conjuncts bear the same Case, apart from some instances of syntactically unbalanced coordination (e.g., *he and me*), as reported in Johannessen 1998.

(18) a. Joop en Joep *heb* ik ____ gezien. (conjunction)
Joop and Joep have I ____ seen
'I have seen Joop and Joep.'
b. Annie, onze directrice, *heb* ik ____ gezien. (apposition)
Annie our manager have I ____ seen
'I have seen Annie, our manager.'
c. Annie, die een dochter van drie heeft, *heb* ik ____ gezien. (ARC)
Annie who a daughter of three has have I ____ seen
'I have seen Annie, who has a three-year-old daughter.'

By contrast, the two parts (e.g., the antecedent and the appositive relative) may not be separated by preposing one of the two, such that the remainder is stranded in the middle field. This is shown in (19) and (20).[20]

(19) a. *Joop heb ik ____ en Joep gezien.
b. *Annie heb ik ____, onze directrice, gezien.
c. *Annie heb ik ____, die een dochter van drie heeft, gezien.

(20) a. *(En) Joep heb ik Joop (en) ____ gezien.
b. *Onze directrice heb ik Annie ____ gezien.
c. *Die een dochter van drie heeft, heb ik Annie ____ gezien.

These patterns are predicted by the Coordinate Structure Constraint, or whatever its deeper cause is.

Furthermore, if appositions and appositive relatives are specifying conjuncts, it is expected that there can be a third (fourth, etc.) part whose status equals that of the second, just as conjunction of more than two phrases is allowed. This prediction of *multiplicity* (or *stacking*) is borne out; it is illustrated for Dutch in (21).[21]

(21) a. Jaap en Joop en Joep, . . .
Jaap and Joop and Joep
b. i. voetbalvandalen, dat tuig, dat schorriemorrie, . . .
football.hooligans that scum that ragtag
ii. Joop, onze held, onze redder in nood, . . .
Joop our hero our savior in distress

[20] Of course, restrictive relatives show similar behavior, but for other reasons (e.g., a restrictive relative is embedded in the antecedent DP, which closes the cycle). Notice that extraposition of the second part *is* possible.

(i) Ik heb Joop ____ gezien, en Joep.
(ii) Ik heb Annie ____ gezien, onze directrice.
(iii) Ik heb Annie ____ gezien, die een dochter van drie heeft.

In my view, extraposition does *not* involve rightward movement, which explains why the patterns in (i)–(iii) and (19)–(20) can be so radically different. Rather, I think extraposed phrases are base-generated to the right; for this I use the technique of specifying coordination plus deletion (see De Vries 2002:chap. 7 for discussion and references).

[21] Notice that the multiplicity facts provide counterevidence to the SCH-type assumption that there is a maximum of one adjunct per projection (e.g., contra the proposal in Smits 1988:114 and its equivalent in Jackendoff 1977).

c. i. Annie, die gek is, van wie niemand de woonplaats kent, . . .
Annie who crazy is of whom nobody the residence knows
'Annie, who is crazy, whose residence nobody knows, . . . '
ii. deze stad, die iedereen kent, waar één miljoen mensen wonen, . . .
this city which everybody knows where one million people live

I will come back to the issue of stacking in point E of section 5.1.

In short, nonrestrictive relative clauses and appositions (and possibly other specifying material) can be subsumed as a third class under coordination.

3.3 A Note on the Syntax of Coordination

Kayne (1994) and Johannessen (1998) represent coordination as $[_{\text{CoP}}$ XP $[_{\text{Co}'}$ Co YP]], where the functional head Co is *and* or *or*. Using a similar structure, Koster (1995, 2000) analyzes specifying coordination as $[_{:\text{P}}$ XP $[_{:'}$: YP]], where he introduces :P as the *Colon Phrase*, named after the punctuation mark. The colon symbolizes specifying coordination. (Koster represents an appositive relative construction as $[_{:\text{P}}$ DP $[_{:'}$: CP_{ARC}]], where DP is the antecedent and CP_{ARC} an appositive relative. If so, this is an instance of unbalanced coordination; however, we will see in the next section that the appositive relative cannot be a bare CP for several reasons.)

Here, I would like to comment briefly on the syntax of coordination itself. I endorse the idea of coordinators as heads—hence the CoP. However, the structure $[_{\text{CoP}}$ XP $[_{\text{Co}'}$ Co YP]] is not without problems. Progovac (1998) argues that conjuncts do not c-command each other, even though there are asymmetries between conjuncts. An example from Dutch that corroborates this is given in (22), where the local anaphor *zichzelf* cannot be bound by the potential antecedent *Joop* in the first conjunct.[22]

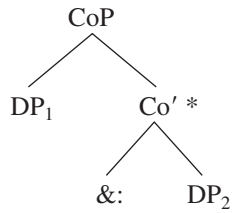
(22) *een gesprek tussen Joop_i en zichzelf_i
a conversation between Joop and SE-self

In De Vries 2005, I argue that the lack of c-command between conjuncts is an instance of a broader effect, namely, the ''invisibility'' of paratactic material in general, and of second conjuncts in particular. Therefore, the grammar must have means to attach a paratactic constituent to the rest of the structure in a way that will eventually block c-command relations from the context. Unfortunately, identifying these means is beyond the scope of this article.[23] Henceforth, as shown in (23), I will simply indicate the opacity of paratactic material by an asterisk next to the Co′ level. Furthermore, if CoP designates specifying coordination, the (abstract) head Co will be indicated by *&:*, which can be paraphrased as 'that is', 'or (rather)', or 'namely'.

[22] By contrast, $\textit{hemzelf}_i$ would be fine. Like English *himself*, it can be used logophorically.

[23] Grootveld (1994) proposes a synthesis between the CoP approach and the parallel structures approach (Goodall 1987) to coordination; this leads to a ''three-dimensional'' grammar, based on the relations dominance, precedence, and ''behindance,'' the last of which is used for coordination. Making use of these ideas, I show in De Vries 2004c, 2005 that the opacity effect of parataxis can be incorporated in a minimalist-type grammar if we define the operation b-Merge (where *b* stands for *behindance*) as an inclusion relation that blocks c-command.

(23)



e.g., [our boss], or [our primus inter pares]

As for appositive relative constructions, I propose that the position of the antecedent is comparable to DP_1 in (23); the relative clause is part of the second conjunct, DP_2. In the next section, I discuss how and why.

4 Appositive Relatives as False Free Relatives in Apposition

I intend to show that the appositive relative is a kind of free relative in apposition to the antecedent. Section 4.1 outlines the proposal, section 4.2 elaborates on the syntax of free relatives in terms of the raising analysis, and section 4.3 shows the details of the analysis for appositive relatives.

4.1 Outline

The idea of treating appositive relatives like appositions can be easily pushed to the limit by assuming that an appositive relative is a kind of free relative in apposition to the antecedent, in other words, that appositive relatives *are* complex appositions.[24] I will show that this is correct.

Since free relatives are extended nominal projections with an embedded relative CP, the structure of a regular appositive relative is roughly as follows:

(24) $[[_{DP_1}$ Annie] &: $[_{DP_2}[_{CP}$ who is our manager]]]

In general, a free relative functions as an argument, that is, a DP. This explains why it can be coordinated with a DP. A regular appositive relative structure thus involves syntactically balanced coordination.[25]

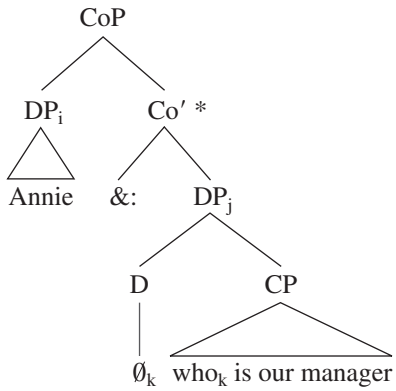
In more detail, the structure of (24) is given in (25), where the DPs are paratactically combined.[26] (The full structure is presented in section 4.3.)

[24] De Rijk (1972) suggests a similar analysis for particular examples in Basque, where the copying of the Case morpheme onto the relative is particularly telling. This is taken over by Lehmann (1984:61, 68), who extends it to comparable examples in Chinese, and by Bianchi (1999:140–144), who—citing Mitchell 1985—extends it to examples in Old English.

[25] However, see point K of section 5.2 for a modification of this statement. Notice that if an ARC were not a free relative, but just a CP—as in Koster 2000—coordination to the antecedent would be problematic because the conjuncts would have unequal categories and functions. (See, for example, Sturm 1995 on the necessity of functional equivalence in syntactically unbalanced coordination.)

[26] As for the intonation, we may assume that a specifying coordinative head &: contains a clue for PF that its (paratactic) complement must be pronounced with a new, low intonation phrase. This is the case for both appositive relatives and appositions. Since restrictive relatives are not construed with a specifying conjunction, no such clue is available for them and they are contained in the original intonation contour.

(25)



The second DP specifies the first. Therefore, *j* and *i* have the same referent. Within the second conjunct—a free relative—CP modifies an abstract pronominal head $Ø_k$ (cf., e.g., Groos and Van Riemsdijk 1981, Alexiadou et al. 2000:sec. 3.2). Sometimes the empty elements can be spelled out; for example, *Annie, who is our manager* can become *Annie, or she who is our manager*. Here *or* (or *that is to say*) fills the specifying coordinative connection position &: (as in (23)) and *she* the empty pronoun position $Ø_k$. This pronoun refers to DP_i; hence, at a discourse level $k = i$. I will return to this issue below.

Notice right away that we predict $Ø_k$ to bear the same Case as the antecedent, if it is spelled out in a language with a full Case system, such as German. This is correct. A comparison with normal coordination and appositions is made in (26).

(26) a. Du kennst doch den Jan und den Peter? (= (16))
b. Du kennst doch den Jan, meinen Cousin? (= (17))
c. Du kennst doch den Jan, ihn/*er der unser Manager ist?
you know yet the-ACC Jan him/*he who our manager is
'You know Jan, (him) who is our manager, don't you?'

In (26c), the pronoun (*ihn*) must have the same Case as the antecedent (*den Jan*).[27]

The structure in (25) is independent of the internal structure of relative clauses. A version of the (revised) standard analysis is compatible with it. However, for my purposes it is relevant that (25) is also compatible with the promotion theory of relative clauses. In that case, raising is performed *within the second conjunct*. As in regular free relatives, the raised NP is abstract. Therefore, it is not the visible antecedent that is promoted, but an empty element. Exactly how this works is the subject of the next two subsections.

[27] This is the general pattern in German. A reviewer notes that the literal English equivalent of (26c) would have *he* rather than *him*. I do not know what causes this difference; however, notice that there are many instances of unbalanced Case in English coordination involving pronouns. Therefore, this does not constitute counterevidence to the approach taken here.

4.2 Notes on Raising and the Syntax of Free Relatives

The promotion theory of (restrictive) relative clauses is advanced in Vergnaud 1974, Kayne 1994, Bianchi 1999, De Vries 2002, and other works. A major advantage over the standard approach is that it accounts for the well-known connectivity effects between the antecedent and the gap in a restrictive relative construction (see section 5.1 for some examples). In its present form, it consists of three major assumptions: (a) the head noun originates within the relative CP and is raised, (b) the relative CP is the complement of the outer determiner D, and (c) a relative pronoun is a determiner.[28] The underlying structure is given in (27), where D_{rel} is a relative pronoun. D_{rel} is overt in *wh*- or *d*-relatives and empty in *that*- or zero relatives.

(27) $[_{DP}$ D $[_{CP}$ (C) . . . $[_{DP_{rel}}$ D_{rel} NP] . . .]]

After movement of DP_{rel} to Spec,CP (for *wh*-checking) and movement of NP to Spec,DP_{rel} (for ϕ-feature checking), the surface structure is (28) for postnominal relatives such as in English.

(28) $[_{DP}$ D $[_{CP[DP_{rel}}$ *NP* $[D_{rel}\ t_{NP}]]_i$ [(C) . . . t_i . . .]]]

Furthermore, I assume that there is a covert link between D and N because of their ϕ-feature and Case agreement.

Let us consider how the promotion theory works in the case of free relatives (FRs). First, notice that there is a crucial difference between true free relatives and false free relatives (also called semifree relatives). Examples from Dutch are (29a–b).

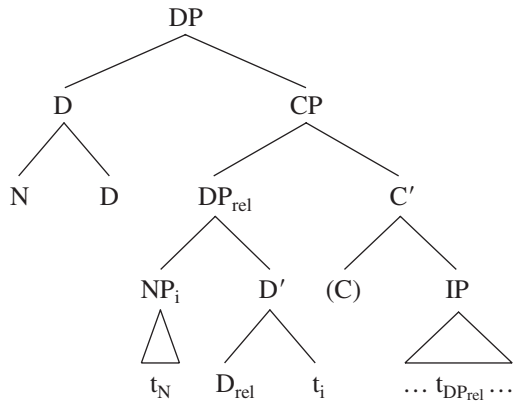
(29) a. *Wie zoet is* krijgt lekkers. (true FR)
who sweet is gets sweets
'Sweets for the sweet.'
b. *Degene/Hij die zoet is* krijgt lekkers. (false FR)
the.one/he who sweet is gets sweets
Lit. 'He who is sweet, will get sweets.'

In a false free relative construction like (29b), the antecedent is pronominal; in a true free relative like (29a), the antecedent is implied in the relative pronoun.

The derivation of false free relatives (see (30)) is similar to that of restrictive relatives. Ultimately, the external determiner selects a relative CP. Before that, the relative DP moves to Spec,CP for *wh*-checking, and the NP, which corresponds to an antecedent in a restrictive relative construction, moves to Spec,DP_{rel} in order to check agreement with D_{rel}, *die* in (29b). Finally, N moves to the external D so that agreement and abstract Case can be checked.

[28] Just to be clear, I should note that I adopt the promotion theory of relative clauses, as well as a universal specifier-head-complement order, but not Kayne's (1994) Linear Correspondence Axiom, which is meant to derive linear order from hierarchy (but does not succeed, I believe); rather, I assume that the asymmetry between sister nodes is a primitive.

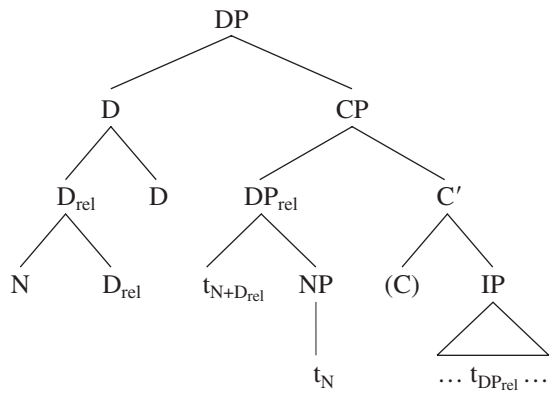
(30) (false FR)



The complex N + D corresponds to an independent personal or demonstrative pronoun, *degene* or *hij* 'he' in (29b), which is a kind of dummy antecedent.[29] Importantly, the dummy antecedent N + D is separate from the relative pronoun D_{rel} *die* 'who'.

By contrast, there is no separation between a dummy antecedent and a relative pronoun in true free relatives. Therefore, we may assume that the derivation leads to the representation in (31).

(31) (true FR)



First, N moves to D_{rel}; then DP_{rel} undergoes *wh*-movement to Spec,CP; then the complex $[N + D_{rel}]$ moves to the external D. This gives the independent pronoun *wie* 'who' in (29a).

The difference between (30) and (31) straightforwardly explains the following facts. First, relative elements (pronouns or complementizers) in false free relatives correspond to those in restrictive relatives. The configuration in which D_{rel} and C appear in (30) equals the one in which they appear in restrictive relatives. For example, a restrictive relative corresponding to (29b) is *de man* ***die*** *zoet is* 'the man who sweet is'. Second, relative pronouns in true free relatives and false free relatives may differ, since $[[N + D_{rel}] + D]$ differs from D_{rel} alone (in traditional terms:

[29] The fact that Dutch *de-gene* and German *der-jenige* 'the one' morphologically consist of a determiner and a nominal element is consistent with this view.

the antecedent is implied). This may cause a different spell-out—for example, *wie* versus *die* in (29a–b).[30] Third, true free relatives potentially cause Case-matching effects; false free relatives do not. In (30), the elements [N + D] and D_{rel} can bear separate Cases, whereas in (31) the complex [[N + D_{rel}] + D] has a role in both the main clause and the subordinate clause. This phenomenon is illustrated for German in (32).

(32) a. Ich kenne den, der dort steht.
I know him who there stands
b. *Ich kenne wer/wen dort steht.
I know who/whom there stands

Here, the relative pronoun is the subject of the free relative, hence nominative, but the antecedent is the object of *kenne* 'know', hence accusative. This is problematic if the antecedent is implied in the relative pronoun, as in (32b).[31]

After this short intermezzo, we can return to appositive relatives. On the basis of the structure and properties discussed for free relatives, we can decide which type of free relative is involved in an appositive relative construction.

4.3 Appositive Relatives as False Free Relatives

The schematic structure proposed for appositive relative constructions in (25) is repeated in (33).

(33) $[_{CoP}[_{DP}$ Annie$]_i$ &: $[_{DP}$ $\emptyset_k$ $[_{CP}$ who_k is our manager$]]_j]$

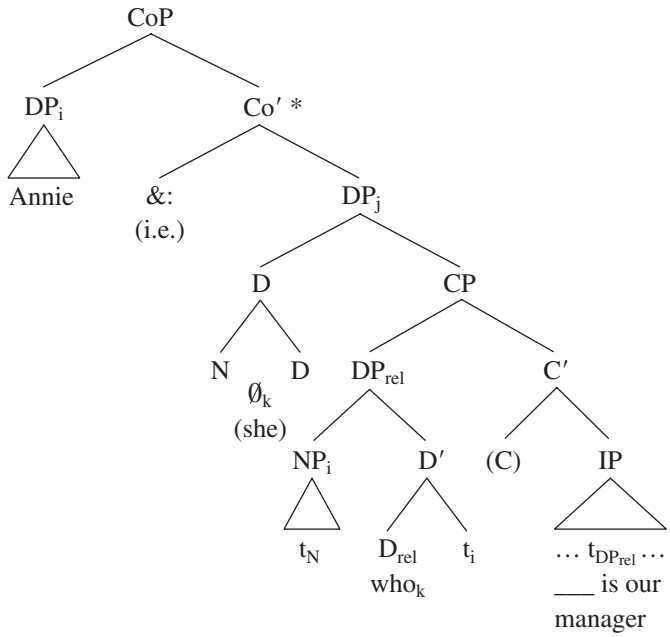
When we compare this with (30) and (31), it becomes clear that an appositive relative is not a true free relative. The relative pronoun does not contain an implied antecedent, that is, an incorporated N. This is reflected by the form of the relative pronoun in Dutch (*d*, not *wh*), which patterns with false free relatives and headed restrictive relatives (I will elaborate on this below). Therefore, I assume that an appositive relative is a false free relative whose pronominal head is empty.[32] So the detailed structural representation is as shown in (34), where the paraphrase in parentheses indicates what is implied in the analysis.

[30] There is a great deal of variation concerning the choice of *wh*- or *d*-pronouns in relative clauses in Germanic. Bennis (2001) shows that this variation arises because a relative pronoun has two functions: it is both an Ā-operator (usually encoded with *w*/*wh*/*q*) and a referring/demonstrative element (usually encoded with *d*/*th*). The outcome is arbitrary. English uses *wh*, standard Dutch and German *d*. In free relatives, however, the referring/demonstrative function is vacuous, since there is no independent antecedent. Therefore, relative pronouns in free relatives have a strong preference for a *w*/*wh*/*q* morphology (which suggests variability). See also Wiltschko 1998 for some discussion.

[31] Technically, we may say that D_{rel} checks Case in the subordinate clause, and D in the matrix. If the two are combined, as in a true free relative, the two Cases must be morphologically compatible, which is not the case in (32b). If the relative pronoun shows no morphological difference for different Cases, then the effect disappears. This is called Case syncretism; see, for example, Groos and Van Riemsdijk 1981. Attraction phenomena are also discussed in Bianchi 2000.

[32] A reviewer wonders why phrases like *by the way* are possible in appositives but not in (false) free relatives, if appositive relatives are analyzed as CPs that restrict an empty head. It seems to me that any full CP offers the syntactic space for such (paratactic) phrases, but they must receive a sensible interpretation. In free relatives this is not possible, but in an appositive relative configuration they can be interpreted with respect to the visible antecedent in the first conjunct, of which the second is a specification. In general, I do not think that a specifying phrase should be interpreted in isolation.

(34)



'Annie, (i.e., she) who is our manager'

The derivation of the second DP is similar to the derivation of restrictive postnominal relative constructions. At the lowest level, NP moves to Spec,DP$_{rel}$ in order to check agreement with D$_{rel}$. This explains why a relative pronoun is a bound pronoun in general (except in true free relatives, obviously); hence, in (34) coindexing holds between Ø and *who*. DP$_{rel}$ moves to Spec,CP for *wh*-checking. The relative CP is selected by D. Finally, N moves to the empty external D so that agreement and abstract Case can be checked. Whether this is overt or covert is irrelevant in this case. The complex [N + D] corresponds to an (abstract) personal pronoun; this is Ø$_k$.

This completes the analysis of appositive relativization as announced in section 2.3. It can be summarized as follows: an appositive relative clause is a false free relative (with an empty pronominal head) that is a specifying conjunct—that is, in apposition—to the visible antecedent. In the remainder of this section, I will present additional evidence that (a) the second conjunct in (34) is a DP, not a bare CP, and (b) this DP represents a false free relative rather than a true free relative.

First, notice that D can be made visible as a pronoun, for instance in the paraphrase of (34). Furthermore, in some cases D must be visible, for instance in French appositive relatives with a non-DP antecedent; see (35), an example taken from Canac-Marquis and Tremblay 1998:133. (The glosses are mine.)

(35) a. Marcelle est très fatiguée, *ce* que Marie n'est pas.
Marcelle is very tired DEM C$_{rel}$ Marie NEG-is not
'Marcelle is very tired, (something) which Marie is not.'

b. Marcelle est arrivée en retard, *ce* qu'elle ne fait jamais.
Marcelle is arrived late DEM C_{rel}-she NEG does never
'Marcelle arrived late, (something) which she never does.'

Second, we predict that relative pronouns in appositive relatives pattern with those in restrictive relatives and false free relatives, not with those in true free relatives—that is, if there is a distinction to begin with. This point can be illustrated in Dutch. The examples in (36) show that the same element *die* 'who' is used in restrictive relatives, false free relatives, and appositive relatives, whereas those in (37) show that *wie* 'who' is used in free relatives and questions. (German exhibits a similar pattern: wer_{FR} versus $der_{ARC,RRC}$.)

(36) a. de vrouw *die* jij kent (RRC)
the woman who you know
b. degene *die* jij kent (false FR)
the.one who you know
c. Annie, *die* jij ook kent (ARC)
Annie who you also know

(37) a. *wie* jij kent (true FR)
who you know
b. *Wie* ken jij? (question)
who know you?
'Who do you know?'

The explanation is as follows. A relative pronoun in restrictive relatives, false free relatives, and appositive relatives is a relative determiner, whereas in true free relatives D_{rel} is combined with the abstract antecedent and becomes a ''free'' pronoun, comparable to an interrogative pronoun (see also footnote 30).

Another illustration of the difference between relative elements in free relatives and appositive relatives is the French/Italian opposition between qui/chi_{FR} and que/che_{ARC} in object relatives. A French example is (38), taken from Bianchi 1999:145.

(38) a. *Qui* tu as rencontré est malade. (true FR)
who you have met is sick
'The one whom you met is sick.'
b. Jean, *que*/**qui* je connais bien, est malade. (ARC)
Jean who I know well is sick

Que/*Che* is a relative complementizer, normally used in object relatives. In these cases, D_{rel} is phonetically empty. If, however, D_{rel} is combined with N and D into a free pronoun, as in (38a), it surfaces as *qui*/*chi*, which in turn leads to ''deletion'' of the complementizer.[33]

[33] There are several theories about the surface forms of relative pronouns and complementizers, combinations of the two, and the status of the Doubly Filled Comp Filter. See, for example, Dekkers 1999, Rooryck 1997, and the references cited there.

Third, Case-matching effects like those reported for true free relatives—see (32)—are not expected in appositive relatives, where the abstract pronominal antecedent $\emptyset_k$ is independent from the relative pronoun; this is comparable to the situation in restrictive relatives and false free relatives. See also point B of section 5.1.[34]

Finally, there are differences in pied-piping between appositive relatives and true free relatives. Pied-piping in true free relatives is generally impossible (see Groos and Van Riemsdijk 1981, Smits 1991, and De Vries 2004a,b for comment). For appositive relatives, false free relatives, and normal restrictive relatives, this is not the case.[35]

(39) a. *I talked to with whom you danced yesterday. (true FR)
b. I talked to Mary, with whom you danced yesterday. (ARC)
c. I talked to the man with whom you danced yesterday. (RRC)
d. I talked to him/the one with whom you danced yesterday. (false FR)

The explanation for the contrast in (39) is straightforward. In section 4.2, we saw that D_{rel} is connected to the external determiner (as well as the head noun) in true free relatives; this reflects the fact that the antecedent is implied in the relative pronoun. In (39a), this instance of head movement is blocked by the intervening preposition. In the other types of relatives, there is no such movement: the relative pronoun is independent of the antecedent; therefore, (39b–d) are grammatical.

I conclude that appositive relativization is specification of an antecedent with a false free relative, a complex DP. This account automatically overcomes Bianchi's (1999:144–146) arguments against Koster's (1995, 2000) conjunction approach to appositive relatives, since her critique refers specifically to the idea of bare CP conjunction and stresses the differences between true free relatives and appositive relatives, as I have done here.

5 The Behavior of Appositive Relatives Explained

Now let us turn to the properties of appositive relatives (possibly as opposed to restrictive relatives) and see how the present account explains them.[36] Section 5.1 discusses behavior related to coordination and scope; section 5.2 elaborates on the implied antecedent and raising. The examples are mine, unless noted otherwise. I will not discuss how the other theories advanced in the literature could or could not deal with the data presented here (but recall the comments made in section 2).

[34] However, see De Vries 2004a for instances of appositive relative constructions with a pronominal antecedent in Dutch, in which a matching effect shows up for some speakers. This can be explained if the construction is reanalyzed as involving a true free relative after all. I take this to be another indication that the overall approach is on the right track; however, since the data are quite complicated, I cannot proceed on this issue here.

[35] I am aware that, at least in English, the pied-piping possibilities are somewhat broader for appositive relatives than for restrictive ones, but that is a different issue. The subject of pied-piping is beyond the scope of this article (see further De Vries 2002:188–109, 321ff.; to appear).

[36] A more exhaustive discussion of the properties of appositive relatives can be found in De Vries 2002:chap. 6.

5.1 Behavior Related to Coordination and Scope

This section discusses nine different issues related to coordination and scope.

A. As shown in section 2.2, an appositive relative clause, contrary to a restrictive relative clause, is not in the scope of a determiner or quantifier that belongs to the antecedent. An example from which this is obvious is repeated in (40).

(40) a. all the lecturers that passed the test (RRC)
b. all the lecturers, who passed the test (ARC)

I have argued that in an appositive relative construction the appositive relative clause specifies the whole antecedent (see also section 2.2). This antecedent—including a specifier or determiner—is embedded within the first conjunct of a specifying coordination phrase. Schematically:

(41) $[_{CoP}[_{DP}$ D NP] &: $[_{DP}$[ARC]]]

The determiner itself is embedded within the overt antecedent. Therefore, it does not c-command the appositive relative; hence—by assumption—it cannot take scope over the appositive relative, as required.

B. The semantic θ-role and the syntactic role that the ''pivot'' constituent plays in the relative clause are in principle independent of its roles in the matrix clause. For instance, in (42a) *Pete* is agent/subject and *who* recipient/subject. In (42b), *the White House* is theme/prepositional object and *where* location/adverbial phrase.

(42) a. Pete, who had received a book token, sped to the bookshop.
b. We spoke about the White House, where vile plans were contrived.

This role independence is guaranteed automatically, since (a) the antecedent is the first conjunct, which is an argument in the matrix, and (b) the relative pronoun is an argument in a clause embedded in the second conjunct. The independence is similar to that found in restrictive relatives (but the configuration is different).[37] (See also Givón 1984:chap. 15.)

C. Since appositive relatives are complex appositions, hence specifying conjuncts, they are not essential for the grammatical status and the meaning of the matrix; they provide additional information. Therefore, they can be deleted without loss of acceptability, like many adverbial phrases. On the other hand, restrictive relatives cannot be deleted without a significant shift in meaning, or even loss of acceptability; a famous example by Vergnaud is *the Paris *(that I love)*.

D. Appositive relatives follow restrictive relatives and other complements of the antecedent. An example from Jackendoff 1977:171 is (43). See also Smits 1988 and (e.g.) Platzack 1997 for examples in other languages.

[37] Despite the role independence, there can be language-specific restrictions on the *internal* role (i.e., the role of the relative pronoun/operator inside the relative clause), as described for restrictive relatives by, for example, Keenan and Comrie (1977) and Lehmann (1984). With respect to appositive relatives it may be noted that, according to Klein (1976: 152), the internal role can never be that of a predicate noun.

(43) a. The man that came to dinner, who was drunk, fainted.
b. *The man, who was drunk (,) that came to dinner fainted.

This property follows automatically from the present approach, where restrictive relatives or complements are embedded within the maximal projection of the antecedent DP in the first conjunct. Therefore, they precede specifying material such as an appositive relative, which resides in a second conjunct.[38] Schematically:

(44) [[$_{DP}$ D NP RRC] &: [$_{DP}$[ARC]]]

E. As stated in section 3.2, coordination allows for multiplicity (i.e., more than two conjuncts). Since appositive relatives are specifying conjuncts, it follows that stacking should be possible in principle. This is correct; see the English examples in (45), the German example in (46), and the Dutch examples in (47). Example (45b) is taken from Grosu 2000:112; (46) is from Lehmann 1984:198.[39]

(45) a. this man, who came to dinner late, about whom nobody knew anything, . . .
b. John, who never finished high school, who can't in fact even read or write, wants to do a doctorate in astrophysics.

(46) Ich, der ich mein Leben lang gearbeitet habe, der ich noch jeden Pfennig
I who I my life long worked have who I yet every penny
zweimal umgedreht habe, ausgerechnet ich werde für einen Lebemann gehalten.
twice turned have of.all.people I am for a bon.vivant kept
'I, who have worked all my life, who have watched every penny, of all people I am regarded as a bon vivant.'

[38] A reviewer suggests that a restrictive relative can restrict an entire DP conjunction, as in *the man and the woman who got married yesterday*. If so, we may wonder if the facts in (43) still follow. However, we saw in section 2.2 that a restrictive relative must be within the scope of the determiner (in any theory); hence, the normal construction is *[the [[man and woman] who got married yesterday]]*, which exhibits coordination on the NP level. If the relative appears to be on a higher level, the construction probably involves right node raising (no matter how it is analyzed): *the man ~~RC~~ and the woman RC*. In some special cases, the shared constituent can refer to the semantic combination of the two leftward parts, which act as a split antecedent. But this is a much more general problem; compare, for example, *John whistled ____ and Mary hummed a similar tune* or *A man came ____ and a woman left who knew each other well*. An analysis of right node raising, split antecedents, and semantic sharing is well beyond the scope of this article. See Link 1984, Moltmann 1992, and Hartmann 2000 for some discussion.

[39] The appositive relatives in (46), which are complex appositions, are followed by yet another (normal) apposition: *ausgerechnet ich*, which semantically seems to function as a ''summary'' by resuming the antecedent. From the multiplicity property of coordination it follows that this is syntactically possible in any of the examples cited. For instance, we may add *i.e., this man* in (45a–b) and (47a–b). Furthermore, a reviewer suggests that (48a) improves if we do so. This confirms my argument that (48a) is not unacceptable for syntactic reasons.

Another issue concerning (46) is the presence of the doubling pronoun *ich* in the relative clause. Clearly, it is there for the agreement with the verb (see also De Vries 2004a on matching and agreement); however, I do not know of any proposal regarding its syntactic position. Perhaps the phenomenon is to be compared with clitic doubling in Romance.

(47) a. Joop, die op de derde rij zat, van wie we nu nog niet weten of
Joop who on the third row sat of whom we now yet not know if
hij wel een kaartje had, genoot van de voorstelling.
he indeed a ticket had enjoyed (of) the performance
'Joop, who sat in the third row, regarding whom we still do not know if he had a ticket, enjoyed the performance.'

b. Popeye, die van spinazie houdt, die daarom ook heel sterk is, redde
Popeye who (of) spinach likes who therefore also very strong is saved
Olijfje.
Olive Oyl
'Popeye, who likes spinach, who is therefore very strong, saved Olive Oyl.'

c. Hij woont in Amsterdam, dat 750,000 inwoners heeft, waar bovendien
he lives in Amsterdam which 750,000 inhabitants has where moreover
vele toeristen komen.
many tourists come
'He lives in Amsterdam, which has 750,000 inhabitants, where many tourists go as well.'

See also Grosu and Landman 1998 for discussion.

Stacking of appositive relatives is rare, but it is syntactically possible. This property is not well known. For instance, Jackendoff (1977:171) claims that appositive relatives cannot be stacked, contrary to restrictives. Note that stacking must be understood as the asyndetic combination of material. It is generally agreed that appositive relatives can be combined by overt coordination (see, e.g., Alexiadou et al. 2000:31, Platzack 2000:290). Examples (48a–c) are from Jackendoff 1977:171.

(48) a. *the man, who came to dinner, who hated lox (ARC)
b. the man, who came to dinner and who hated lox
c. the man who came to dinner who hated lox (RRC)
d. the man who came to dinner and who hated lox

Although appositive relatives are analyzed as involving coordination here, (48a) and (48b) are not the same. In (48a), two appositive relatives are each attached to the antecedent by means of specifying coordination (which is usually asyndetic), whereas in (48b), two appositive relatives are combined by normal conjunction, and—together—added to the antecedent as one complex specification. For (48a) we need three intonation phrases, for (48b) only two. This may be the reason why the strategy in (48b) is somewhat easier (or rather, less hard) to interpret, and therefore preferred. For stacked restrictive relatives, as in (48c), the problem of an additional intonation contour does not arise; there is no difference between the two strategies in (48c) and (48d) other than the overt presence or absence of the conjunction. This could explain the relative contrast between stacking of appositive relatives and stacking of restrictive relatives in examples like

(48a–d). Here, my background assumption is that all instances of stacking are simply cases of asyndetic coordination.[40]

Note that all the examples in (45)–(47) are also possible if the two appositive relatives are combined by an overt conjunction. It is not completely clear to me what causes the difference in acceptability between (45)–(47) and (48a); it seems that pragmatic factors play a role (see also Grosu 2000:112). Still, I think the conclusion is justified that there is no syntactic constraint that prevents the stacking of appositive relatives.

F. The theory of extraposition must allow for extraposition of—at least—any phrase that is not an argument of the matrix predicate (see De Vries 2002:chap. 7 and the references there). Since appositive relatives are specifying conjuncts, hence only an apposition to an argument (or something else), it follows that extraposition is possible in principle, which is correct.[41] Some examples from Dutch are given in (49); here the participle marks the normal clause boundary.

(49) a. Ik heb *Joop* gezien, *die twee zusters heeft*.
I have Joop seen who two sisters has
'I saw Joop, who has two sisters.'

b. Gisteren heb ik *mijn zuster* bezocht, *die blond haar heeft* (zoals je weet).
yesterday have I my sister visited who blond hair has (as you know)
'Yesterday I visited my sister, who has blond hair (as you know).'

c. *Ritzen* kwam op bezoek, *van wie laatst een schaamteloos boek over*
Ritzen came on visit by whom lately a shameless book on
ministerschap is verschenen.
ministership has appeared
'Ritzen came to visit, by whom a shameless book on ministership was published recently.'

(Notice that extraposition of regular conjuncts, but also of restrictive relatives, is possible as well; see footnote 20.)

In English, extraposition is somewhat less productive but not impossible. An example from Fabb 1990:59 is (50).

(50) I met *John* yesterday, *who I like a lot*.

There seems to be a misconception about this property. For instance, Emonds (1979:234), who refers to Vergnaud (1974:181), writes that ''appositive relatives, unlike restrictive relatives, do not undergo what is generally thought of as 'Extraposition from NP.''' Clearly, this claim is falsified by examples like (49a–c) and (50). So let us look at Emonds's examples:

[40] See De Vries 2002:198ff.; but also Stockwell, Schachter, and Partee 1973 and Jackendoff 1977 for discussion on stacking and coordination of restrictive relatives in English.

[41] It is always the relative clause that is extraposed, not the antecedent. This reflects a general property of coordination: it is always the second conjunct that is extraposed, not the first (see also Progovac 1998).

(51) a. Some men appeared at the door that Mary had been insulting. (RRC)
b. *These men appeared at the door, who Mary had been insulting. (ARC)
b.′ These men, who Mary had been insulting, appeared at the door.

Since the appearance of men at the door is the consequence of the insult, there is a logical ordering between the two clauses. If the relative clause is extraposed, the discourse is confused. In the case of a restrictive relative this is acceptable, because the relative is included in the intonation contour of the matrix; therefore, the hearer has a cue that complicating information is to follow the matrix clause. On the other hand, an appositive relative is not part of the intonation contour of the matrix, so the confused sequence of clauses in (51b) is much harder to interpret, and acceptability decreases.[42]

The appositive relatives in (49) and (50) are not related to the respective matrix clauses in the sense of a continuation or cause/effect reading. Therefore, extraposition is unproblematic for the discourse. My conclusion is therefore that extraposition of appositive relatives is syntactically possible in general, but acceptability can be influenced by discourse factors. This is confirmed by the following examples in Dutch, which show the opposite of the pattern in (51b–b′). (Example (52) is inspired by Safir 1986:fn. 9.)

(52) a. Elke soldaat kan tot God bidden, die hem dan zal vergeven.
every soldier can to God pray who him then will forgive
'Every soldier may pray to God, who will then forgive him.'
b. *Elke soldaat kan tot God, die hem dan zal vergeven, bidden.

(53) a. Ik heb het mijn tante verteld, die in tranen uitbarstte.
I have it my aunt told who in tears burst
'I told it to my aunt, who burst into tears.'
b. *Ik heb het mijn tante, die in tranen uitbarstte, verteld.

According to Smits (1988), appositive relatives like these are orphans, base-generated in a right-peripheral position. I would say instead that extraposition is obligatory here—regardless of the analysis of extraposition as such—because the discourse expresses a sequence of events. Therefore, the (b) examples in (51)–(53) are not syntactically ungrammatical; rather, they are unacceptable for other reasons.

G. An appositive relative does not allow for collocations split across a relative construction, unlike restrictive or degree relatives; see (54), for example, from Vergnaud 1974.[43] See also Bianchi 1999 on this subject.

[42] A reviewer remarks that a sentence like *These men appeared at the door, after Mary had insulted them* is fine, although the discourse and the intonation are comparable to those of (51b). However, the word *after* gives an immediate clue for the causal/temporal interpretation, which is lacking in an appositive relative.

[43] In general, the judgments are influenced by the level of concreteness of the head noun and the amount of semantic content in the appositive relative; see De Vries 2002:78ff. and the references there.

(54) a. The horrible face that Harry made at Peter scared him. (RRC)
b. *The horrible face, which Harry made at Peter, scared him. (ARC)

Constructions like (54a), which can be produced in all of the Germanic and Romance languages, have been taken to constitute evidence for the promotion analysis of (restrictive) relative clauses; see section 4.2. Clearly, then, something in the structure of appositive relatives rules out these constructions. The reason is that they involve specifying coordination. I have shown in section 3.3 that there is no c-command relation between conjuncts. Therefore, in the theory advocated here, the antecedent in (54b) cannot be reconstructed into the relative clause. This, however, is necessary for the interpretation. Another way of looking at it is that a collocation cannot be inserted ''en bloc'' in an appositive relative, because there is no derivational link between the relative gap and the overt antecedent; therefore, (54b) cannot be derived.

H. Furthermore, a restrictive relative, but not an appositive one, allows binding of an anaphor embedded within the antecedent by a subject from within the relative clause. This is illustrated for Dutch in (55).

(55) a. De verhalen over zichzelf$_i$ die Joop$_i$ gisteren hoorde, (RRC)
the stories about SE-self which Joop yesterday heard
waren gelogen.
were lied
'The stories about himself that Joop heard yesterday were lies.'
b. ?*Deze verhalen over zichzelf$_i$, die Joop$_i$ toevallig (ARC)
these stories about SE-self which Joop incidentally
gisteren hoorde, waren gelogen.
yesterday heard were lied
Intended: 'These stories about himself, which Joop incidentally heard yesterday, were lies.'

This, too, has been used as an argument for the raising analysis: the anaphor cannot be bound unless the antecedent is reconstructed into the relative clause (notice that the referent of the relative pronoun *die* differs from that of *zichzelf*). The reason why it does not work in appositive relatives is, again, that the antecedent is fixed in the first conjunct. It cannot be reconstructed into the relative clause, because it has not been moved from there to begin with.

I. An appositive relative, contrary to a restrictive relative, is opaque for syntactic licensing relations (see, e.g., Jackendoff 1977, Demirdache 1991). Consider variable binding as an example.

(56) a. Everyone$_i$ spoke about the museum that he$_i$ had visited. (RRC)
b. *Everyone$_i$ spoke about the Millennium Dome, which he$_i$ had visited. (ARC)

Here, the potential binder of the variable *he* is not the antecedent of the relative clause but an element higher up in the matrix: the subject *everyone*. Therefore, it seems to c-command the relative construction. Why then is (56b) excluded? Recall from section 3.3 that a second conjunct is always shielded from c-command relations. Therefore, if appositive relatives are to be analyzed

as second conjuncts, they are expected to follow this general pattern (no matter how it is to be explained).[44]

It has been pointed out to me that variable binding into a regular conjunction seems to be possible in some cases, though. An example could be (57).

(57) [Every dad]$_i$ claimed that Cruijff's son and his$_i$ own son have been on the local soccer team together.

However, there seem to be exceptional examples of variable binding into an appositive relative as well. Example (58b) is from Sells 1985:2.

(58) a. [Every dad]$_i$ gave his$_i$ son a do-it-yourself kit, which he$_i$ subsequently put together himself$_i$.
b. [Every rice-grower in Korea]$_i$ owns a wooden cart, which he$_i$ uses when he$_i$ harvests the crop.

Sells shows at length that these kinds of examples do not involve syntactic variable binding, but a type of discourse linking called ''cospecification.'' A direct indication of this is that the relation between *every* and *he* can be intersentential, as shown in (59), from Sells 1985:3.

(59) [Every rice-grower in Korea]$_i$ owns a wooden cart. He$_i$ uses it when he$_i$ harvests the crop.

Therefore, a c-command relation is certainly excluded; hence, syntactic binding is impossible. Cospecification is available only with certain operators (excluding negation) in a continuative discourse, which implies that the ''expected center'' (usually the focus) is confirmed in the following clause by pronominalization and that there is a temporal parallelism (more precisely: ''temporal or modal subordination''); see further Sells 1985.

In (57), the coordinated DPs are in the same predicate. Therefore, it seems to me that the conditions on cospecification are automatically fulfilled. Still, syntactic variable binding is preferred to cospecification, since the examples above are more marked than those in which a regular c-command relation holds—for example, *[Every dad]$_i$ tells his$_i$ son that he$_i$ played soccer well in his$_i$ youth*.

5.2 Behavior Related to the Implied Antecedent and Raising

This section discusses five different issues related to the implied antecedent and raising.

J. In both restrictive and appositive relative constructions, a relative pronoun (whether it is overt or not) is a kind of bound pronoun. This is illustrated in (60).

[44] A reviewer notes that Condition C seems to hold, though: for example, *He$_i$ owns a car, which John$_{*i}$ drives every day*. However, it can be argued that Condition C is a discourse condition rather than (or perhaps: in addition to) a syntactic condition depending on c-command. The reason is that it works across sentences as well: *He$_i$ owns a car. John$_{*i}$ drives it every day*. If this is correct, the appositive relative cases are also covered.

(60) a. The postman$_i$ talked to the woman$_j$ who$_{j/*i/*k}$ carried a big package. (RRC)
b. The postman$_i$ talked to Mary$_j$, who$_{j/*i/*k}$ carried a big package. (ARC)

In a restrictive relative, this follows directly from the raising analysis. In an appositive relative, however, the link to the overt antecedent is indirect; see (61) or the tree structure in (34).

(61) $[_{CoP}$ DP_i &: $[_{DPj}$ [N + D] $[_{CP}[_{DP_{rel}}[_{NP}$ $t_N]$ D_{rel} $t_{NP}]$ (C) $[_{IP}$ . . . $t_{DP_{rel}}$ . . .]]]$_j$]
Mary$_i$ $\emptyset_k$ who$_k$

The relative pronoun *who$_k$* is syntactically linked to the implied antecedent of the free relative, $\emptyset_k$; this is similar to the situation in restrictive relatives. In turn, $\emptyset_k$ refers to the overt antecedent DP_i, which is the first conjunct. Since the antecedent does not c-command the second conjunct, it cannot be established syntactically. This, however, is justified. As argued by Sells (1985) and Demirdache (1991), among others, the relation between the antecedent and the referring element in an appositive relative ($\emptyset_k$ in my terms, the relative pronoun in theirs) must be stated in terms of cospecification (see also point I of section 5.1). But this cannot be the whole story. Even though it may explain why the referring element does not have a free/indeterminate antecedent, it does not automatically exclude the possibility of reference to another phrase in the matrix. In fact, it is the concept of specifying coordination that forces the right interpretation. If in the configuration (61) $\emptyset_k$ referred to some unrelated entity DP_x in the matrix, such as *the postman* in (60), it could not be the case that *j* had the same referent as *i*. Therefore, DP_j cannot be interpreted as a specification of DP_i (recall section 3.1), which leads to a semantic anomaly. Thus, this reasoning ad absurdum shows that viewing an appositive relative as a specifying conjunct makes sense only if the empty element is cospecified with the visible antecedent. (Similarly, in a disjunction X or Y, Y cannot be disjoint with a phrase other than X.) Therefore, it is unnecessary to stipulate a constraint like ''the referring element in an appositive relative must be cospecified with the nearest preceding phrase.''

K. Unlike restrictive relatives, appositive relatives can have an antecedent of any category.[45] This is shown in (62) for Dutch (see, e.g., Jackendoff 1977 and Fabb 1990 for examples in English).

(62) CP: De drie wijze mannen adviseerden het aftreden van de Commissie, wat
the three wise men advised the retreat of the Commission which
een juiste beslissing was.
a just decision was
'The three wise men advised the retreat of the Commission, which was a just decision.'

[45] The former is not difficult to explain in the promotion theory, given that (a) the visible antecedent must be selected by D_{rel} within the restrictive relative, and (b) the relative CP must be selected by the head of the category that represents the whole construction. This is only possible with nominal projections. For instance, if an AP were to take a restrictive relative, the head of some unknown extended projection YP of AP would have to select a relative CP, within which D_{rel} would take AP as a complement, which would then be raised and formally linked to Y. This is not a plausible scenario (see also Borsley 1997). Furthermore, see Borsley 1992 for a critique of the analysis proposed in Fabb 1990.

VP: De kat heeft overgegeven, wat de hond hopelijk niet zal doen.
the cat has vomited which the dog hopefully not will do
'The cat vomited, which hopefully the dog will not do.'

AP:[46] De directeur ontkende corrupt te zijn, wat ze echter wel degelijk is.
the manager denied corrupt to be which she however indeed is
'The manager denied being corrupt, which, however, she actually is.'

AdvP: Hij werkte hard, hetgeen is hoe een ambtenaar behoort te werken.
he worked hard which is how a civil.servant ought to work
'He worked hard, which is how a civil servant ought to work.'

PP: De leerstoelgroep vergaderde van 9:30 tot 12:30, wat erg lang is.
the prof. chair-group met from 9:30 to 12:30 which very long is
'The department met from 9:30 till 12:30, which is very long.'

PP: Hij keek verschrikt achter zich, waar echter niets was te zien.
he looked frightened behind SE where however nothing was to see
'He looked behind himself startled, where, however, nothing was to be seen.'

In general, this confirms the present approach in which the link between the antecedent and the relative pronoun in appositive relatives differs from that in restrictive relatives. So let us look at the details. The relevant structure is repeated in (63), where XP is a non-DP antecedent.

(63) $[_{\text{CoP}}$ XP &: $[_{\text{DP}_j}$ [N + D] $[_{\text{CP}}[DP_{rel}[NP\ t_N]\ D_{rel}\ t_{NP}]$ (C) $[_{\text{IP}} \ldots t_{\text{DP}_{\text{rel}}} \ldots]]]]$

Since XP ≠ DP, the coordination is syntactically unbalanced. I argue that this is permitted if [N + D]—which is $\emptyset_k$, the (complex) head of the second conjunct—refers to XP, so that the two conjuncts are functionally equivalent (which is therefore quite different from Koster's (2000) approach). This is possible in principle because a pronoun may refer to concepts, places, times, events, facts, things, and so on. Jackendoff (1977:175) states, ''Relative pronouns in appositives can be anaphoric to the same constituents as ordinary demonstrative pronouns can.'' This implies that they can refer to any syntactic category. See for instance (64). I have included some familiar examples of syntactically unbalanced coordination.

(64) PP: behind you → there there and behind you
CP/VP: she is dull → it, that (I do not believe) that, but rather that she is ill.
AP: corrupt → that (Is she corrupt?) That, and stingy (too).

Relatives appositive to non-DP antecedents are less common than those appositive to DP antecedents (see also Lehmann 1984:277). This is in line with the analysis in (63), since syntactically unbalanced coordination is more marked than balanced coordination in general.

L. Like restrictive relatives, appositive relatives can have a quantified antecedent, but only in special contexts. Some examples are (65a–c), taken from Sells 1985:2 and Del Gobbo 2003: 130.

[46] For independent reasons, a prenominal (attributive) adjective cannot be modified by a relative clause (see, e.g., Emonds 1979).

(65) a. A tutor will register *each student*, who is then responsible for getting his papers to the dean.
b. Every chess set comes with *a spare pawn*, which is taped to the top of the box.
c. They invited *many students*, who arrived late.

The special context is the one necessary for cospecification mentioned in point I of section 5.1. The relation between the relative pronoun and the antecedent supposedly is an instance of E-type anaphora. An E-type pronoun is neither free nor bound and can be paraphrased by a definite description (Evans 1980). Building on work by Irene Heim, Del Gobbo (2003:131) claims that the interpretation of *who* in (65c) is *the students they invited*. Then (65a) must be paraphrased as in (66), if I understand correctly.

(66) A tutor will register each student. *The student (that) a tutor will register* is then responsible for getting his papers to the dean.

The procedure for arriving at this interpretation is quite complicated. It involves Quantifier Raising, a restructuring rule that transforms an appositive relative into a main clause, a rewriting rule for pronouns with an indefinite antecedent, and a specific rule for the formal semantic interpretation of a pronoun augmented by an adjoined clause.

In my analysis of appositive relatives, the pronoun referring to the antecedent is the head of a (semi)free relative. Del Gobbo (2003:189ff.) argues against this proposal, claiming that it would produce the wrong paraphrase in cases like (65a).

(67) *A tutor will register each student, *the one* who is then responsible for getting his papers to the dean.

However, Del Gobbo overlooks the fact that a semifree relative can also be indefinite, as in (68).

(68) a. someone who is depressed
b. something which annoyed me

Therefore, possible paraphrases of the sentences in (65) are the ones in (69).[47]

(69) a. A tutor will register each student: *someone* who is then responsible for getting his papers to the dean.
b. Every chess set comes with a spare pawn: *something* which is taped to the top of the box.
c. They invited many students: *people* who arrived late.

I conclude that the special cases explored by Sells and Del Gobbo are actually compatible with my proposal. If the antecedent is definite (or specific), the referring element is a definite description. If the antecedent is quantified over, the referring element is necessarily indefinite.

[47] Notice that English has no direct plural equivalent of *someone*. Perhaps this is related to the fact that there is no plural indefinite article.

M. Under certain conditions, restrictive relatives but not appositive ones may be introduced by a zero particle, at least in English and the continental Scandinavian languages (see Smits 1988: 70–71).

(70) a. The man I saw yesterday is great. (RRC)
b. *John, I saw yesterday, is great. (ARC)

In the Romance and Germanic languages (and many others),[48] appositive relatives must be introduced by a relative element (i.e., a relative pronoun or complementizer).[49] Probably, this difference follows from the different configuration in the Comp area. Compare (71) and (72), where both D_{rel} and C are empty.

(71) $[_{DP}$ D $[_{CP}[_{DP_{rel}}$ NP D_{rel} $t_{NP}]$ C $[_{IP}$ . . . . . $t_{DP_{rel}}$ . . . . .]]]
the man Ø Ø I saw yesterday

(72) $[_{CoP}$ DP_i &: $[_{DP_j}$ [N + D] $[_{CP}[_{DP_{rel}}[_{NP}$ $t_N]$ D_{rel} $t_{NP}]$ C $[_{IP}$ . . . . . $t_{DP_{rel}}$ . . . . .]]]]
* John $Ø_k$ Ø Ø I saw yesterday

In the restrictive relative (71), there is at least one lexical element in the Comp domain: the antecedent noun *man*. In the appositive relative (72), there are three empty elements in the Comp area in a zero relative. Apparently, this is not possible. One might say that the CP layer cannot exist if it is completely lexically empty. Another possible approach is to assume that $Ø_k$ must be syntactically licensed by a lexical element, for example, an overt D_{rel}. I will not expand on this, but simply assume that it can be formalized.[50]

N. Unlike restrictive relatives, but like free relatives, appositive relatives can (marginally) contain an NP that functions as an additional internal head; see the examples in (73)–(75) from Dutch.[51] Sentences like these have a literary flavor. See also Fabb 1990 for examples from English.

[48] In a survey of the typological literature on relative clauses (De Vries 2002:365–412), I have found not one example of a (postnominal) appositive relative without a relative element. To determine whether the claim about the Comp domain is universal, further study on the languages that use relative affixes or a zero strategy for restrictive relatives is necessary.

[49] English *that* cannot be used as a relative complementizer in appositive relatives (e.g., *John, who/*that I saw yesterday . . .*). However, the restriction of a relative complementizer to restrictive relatives is a language-particular coincidence in English, not a universal property. According to Smits (1988), appositive relatives can be introduced by a complementizer in the Scandinavian languages (*som*), French (*que*), Catalan, Italian, and Portuguese. (An equivalent example in French is *Jean, que j'ai vu hier . . .*) Lehmann (1984) provides many examples from other language families. Therefore, Jackendoff's (1977:171) claim that a relative complementizer can only be used in restrictive relatives has a very limited scope.

[50] Notice that it is again the promotion analysis of relativization (in combination with the CFR approach) that predicts the difference between restrictive and appositive relatives. In the (revised) standard analysis, the antecedent is not included in the relative CP; hence, the Comp domain is completely empty in restrictives, too. However, Cinque (1982), basing his analysis on Chomsky and Lasnik 1977, approaches this matter differently. He assumes that a relative pronoun in an English appositive relative cannot be deleted because it is not c-commanded by the head noun; therefore, it is supposed to be unrecoverable.

[51] These so-called head-internal free relatives and appositive relatives are discussed in more detail in De Vries 2004b.

(73) *Dit werk welk gedicht Rutger Kopland geschreven heeft, (RRC)
this work which poem Rutger Kopland written has
is herdrukt.
has.been reprinted
'This work which poem Rutger Kopland has written has been reprinted.'

(74) a. Welke *onverlaat* zoiets doet, verdient straf. (FR)
which miscreant such.a.thing does deserves punishment
'Whichever miscreant does such a thing deserves to be punished.'
b. Ik lees welk boek me ook maar onder ogen komt.
I read which book me NEG.POLARITY ITEM under eyes comes
'I read whichever book I get a look at.'

(75) a. ''Jonge sla,'' welk *gedicht* van Rutger Kopland veel gelezen (RRC)
young lettuce which poem of Rutger Kopland much read
wordt, is herdrukt.
is has.been reprinted
'''Young Lettuce,'' which poem by Rutger Kopland is read by many people, has been reprinted.'
b. Ze schaamden zich diep, onze werkloze echtgenoten, welke *stakkerds*
they shamed SE deeply our unemployed husbands which poor.devils
geen Ferrari hebben.
no Ferrari have
'They were deeply ashamed, our unemployed husbands, which poor devils do not have a Ferrari.'
c. Hond en kat zijn als water en vuur, welk *feit* reeds lang bekend is.
dog and cat are like water and fire which fact already long known is
'Dogs and cats are like water and fire, which fact has been well known for ages.'

Clearly, there is no available position for the additional nominal phrase in the promotion theory of restrictive relatives, since the NP complement position of D_{rel} is occupied by the antecedent that is to be raised.[52] This explains why (73) is impossible. By contrast, the NP may take the position of the implied antecedent in a free relative. Similarly, in an appositive relative, the complement position of D_{rel} may be occupied by an overt NP, like *gedicht* 'poem' in (75a). The antecedent *''Jonge sla''* is in the first conjunct; the second conjunct acts as an internally headed free relative. This is shown in (76).

(76) $[_{CoP}[_{DP_i}$ ''Jonge sla''] &: $[_{DP_j}$ (D) $[_{CP}[_{DP_{rel}}$ welk $[_{NP}$ gedicht]] (C) . . . $t_{DP_{rel}}$ . . .]]]

In Dutch, only the relative pronoun *welk(e)*, which is morphologically a *wh*-word, can be used

[52] Notice, however, that there is an available position in the (revised) standard analysis. Thus, this is another advantage of the raising approach to relativization.

as a dependent relative pronoun.[53] It is the additional NP that refers to the antecedent, instead of some pronominal element $\emptyset_k$. This can be compared with the situation in a discourse like *I do not want to meet **John** again because **the bastard** stole my bike last week*. Here, too, a full noun phrase is replaced by another one, instead of a pronoun. This is unusual, as is (75). It can be shown that anaphoric epithets may not be syntactically bound (see, e.g., Lasnik 1989, Lasnik and Stowell 1991). This condition is met in (76) as well, as there is no c-command between conjuncts (recall section 3.3).[54]

Finally, notice that we predict the following with respect to connectivity effects (recall point H of section 5.1). In normal appositive relatives, reconstruction is impossible, as there is no raising of the overt antecedent. If there is an additional internal head, however, it is this head that can be reconstructed, because it is pied-piped with the *wh*-moved relative pronoun; compare (77a) with (77b).

(77) a. ?*Deze verhalen over zichzelf$_i$, die Joop$_i$ gisteren toevallig
these stories about SE-self which Joop yesterday incidentally
had gehoord, waren pure leugens.
had heard were pure lies
Intended: 'These stories about himself, which Joop happened to hear yesterday, were mere lies.'

b. ''Oude sla,'' welk gedicht over zichzelf$_i$ Joop$_i$ aan het schrijven
old lettuce which poem about SE-self Joop on the writing
is, kan men niet als bijster origineel beschouwen.
is can one not as very original consider
'''Old Lettuce,'' which poem about himself Joop is writing, can be regarded as none too original.'

In (77b), the anaphor *zichzelf* is bound by the subordinate clause subject *Joop*.

In short, I conclude that the behavior of appositive relatives—partly as opposed to restrictive relatives—follows from the present approach without stipulations.

6 Some Crosslinguistic Considerations

The CFR approach to appositive relativization has been developed on the basis of data from the Germanic and Romance languages—that is, on the basis of postnominal relative constructions. In this article, I have used illustrations mainly from English and Dutch. My tentative claim is that the analysis (or its predictions) has (have) a universal scope. So let me briefly address some direct consequences and potential problems.

[53] This is also the reason why NP does not move to the left of D_{rel}. In English, *which* can be used in this construction (cf. *which man*) but not *who* (because of **who man*).

[54] Notice that the discourse extension of Condition C mentioned in footnote 44 does not hold for epithets. For instance, *John$_i$ fired me. The bastard$_i$ found a cheaper employee* is all right.

Since, by definition, a specification follows the element specified (recall that specification is asymmetric; see sections 3.1, 4.1), two (related) immediate predictions ensue:

(78) a. Prenominal nonrestrictive appositions do not exist.
b. Only postnominal relatives can be appositive.

My hypothesis is that (78) is true crosslinguistically. In English, (79) is a relevant illustration.

(79) a. Joe, who was ill last week
b. *who was ill last week, Joe

The fact that restrictive relatives cannot precede their antecedents in English, either, has nothing to do with (78). Complements are always to the right in English. Moreover, many OV languages have prenominal restrictive relatives—Korean and Abkhaz, for instance. (Notice that prenominal relatives exist in SVO languages as well, for example, in Chinese, Finnish, and Palauan.) An interesting case is Turkish. It has prenominal (participial) relatives, but it uses a postnominal or extraposed (finite) variant especially for appositives (see, e.g., Lehmann 1984, Veld 1993). Examples are (80a–b), taken from Lehmann 1984:54, 144.

(80) a. Orhan-in gör-düg-ü adam cik-ti. (RRC, prenominal)
[Orhan-GEN see-NR-POSS3] man leave-PRET
'The man who Orhan saw left.'
b. Ben-i unut-ma ki san-a yardim et-ti-m. (ARC, postnominal)
I-ACC forget-NOT [C_{rel} you-DAT help do-PRET-1]
'Do not forget me, who helped you.'

This is in direct agreement with the prediction in (78). Similarly, we know that Basque, Lahu, and Nama appositive relatives are postposed, whereas these languages' restrictive strategy is prenominal (see Hagman 1973, Lehmann 1984:278, and De Vries 2002:365ff. for further references).

Thus, so far, (78) is confirmed. Nevertheless, it has been reported that prenominal appositive relatives seem to exist in some languages (albeit marginally), for instance, in Japanese and (Mandarin) Chinese. However, Lehmann (1984:277–278) states that they are restricted to proper names and definite NPs with a demonstrative pronoun.[55] Moreover, in so-called prenominal appositive relative constructions the position of the external determiner, if present, differs from its position in restrictive relative constructions. For instance, in Japanese the external determiner is spelled out between the relative clause and the antecedent in an appositive relative construction, whereas its normal position is in front of a restrictive relative clause; see (81), taken from Lehmann 1984: 285. (Interestingly, the situation is reversed in Chinese; see Huang 1982 and Del Gobbo 2003.)

[55] According to Lehmann (1984:277), the following scale of potential antecedents is relevant for appositive relatives in general: *proper names → definite or generic NPs → personal pronouns → sentences*. Proper names are the most and sentences the least accessible to appositive relativization.

(81) a. Boku-ga sonkeisi-te iru *kono* hito-ga Tookyoo-ni sun-de iru. (ARC D N)
[I-NOM respect-GER be] DEM man-NOM Tokyo-LOC live-GER be
'This man, who I respect, lives in Tokyo.'
b. *Kono* boku-ga sonkeisi-te iru hito-ga Tookyoo-ni sun-de iru. (D RRC N)
'The man that I respect lives in Tokyo.'

These facts suggest that the appositive construction is deceptive.

This impression is independently confirmed by Del Gobbo (2003), who analyzes prenominal relative clauses in Chinese. Some instances of these have been taken to be nonrestrictive, for example, by Huang (1982). However, Del Gobbo claims that they have been misinterpreted: Chinese prenominal relatives cannot be appositive. Indications for this statement are, among other things, that the antecedent of a supposed prenominal appositive relative cannot be nonnominal, that sentential adverbs of modification cannot be used, and that the relative is transparent for quantifier binding. Therefore, all relatives in Chinese are restrictive in some sense. Furthermore, Del Gobbo argues that appositive relatives are an instance of E-type anaphora in general. From the conditions on E-type interpretation it ensues that an appositive relative must linearly follow its antecedent. It seems to me that the same reasoning applies to examples like (81a) in Japanese. This intuition is confirmed by Hidetoshi Shiraishi (pers. comm.), but further inquiry is needed. Another indication that Del Gobbo's claim is on the right track may be the fact that there is no intonation break in this type of example (see Keenan 1985:169).

In principle, there is a second way to reinterpret ''prenominal appositives.'' Whether it is available depends on the intonation, among other things. What seems to be an appositive prenominal relative may actually be a (definite) free relative followed by an apposition. An English paraphrase is, for example, '(the one) who I love, (viz.) Jean, lives in Paris'. If so, it is the noun phrase 'Jean' that specifies the relative, not the other way around. In that case, there is no appositive relative at all in this construction; recall that appositive relatives are defined as specifying conjuncts, whereas here the relative is something that is specified itself. This would also explain why the proper name or demonstrative expression in examples like these cannot be replaced by a personal pronoun, since that renders a meaningless specification. So it is the information structure that regulates the possibilities. In short, the structure of an apparently prenominal appositive relative may also be (82).

(82) $[[_{DP}\ RC_{FR}]\ \&:\ [_{DP}\ D\ NP]]$

(82) has no prenominal appositive relative; instead, it has a postnominal apposition, which is in accordance with (78). Although (82) and the equivalent postnominal appositive relative construction differ in information structure, their meaning is the same.[56] The following Japanese examples are provided by Hidetoshi Shiraishi (pers. comm.):[57]

[56] A reviewer remarks that if appositive relatives are not primitives but derived (which is my claim; see section 4), then they are not necessarily of the same (syntactic) type universally. An illustration of the potentially expected language variation, then, is the Japanese case discussed above. However, notice that this alternative way of looking at things implies a purely semantic definition of appositive relatives, which differs from the approach I have taken.

[57] The status of the particle *no* is debated. Culy (1990:254ff.) argues that it acts as a nominalizer in relative contexts.

(83) Boku-wa uchi-no shochoo-no, John-ni, aisatsu shi-ta.
I-TOP our-GEN boss-PTL John-DAT greet-PAST
'I greeted (who is) our boss, John.'

(84) Boku-wa uchi-no kaisha-ni shozuku shite-iru no-ni, John-ni, at-ta.
I-TOP our-GEN company-DAT belong PTL-DAT John-DAT meet-PAST
'I met who belongs to our company, John.'

(85) Kare-wa boku-ga tsukutta-no-o, zoo-o, nusunda.
he-TOP I-NOM make-PTL-ACC statue-ACC stolen
'He stole what I made, a statue.'

Thus, I tentatively conclude that prenominal appositive relatives do not exist; examples that seem to involve such a construction either are disguised restrictive relatives as described by Del Gobbo (2003) or involve apposition to a free relative, which is in fact the opposite of the normal construction.

In short, on the basis of the CFR approach defended here, we expect that only postnominal relatives can be appositive.[58] As far as I can see, this is correct. Some potential counterexamples can be analyzed differently. In general, there is much typological work on restrictive relatives, but very little information on appositive relatives outside the Germanic and Romance language families. Further inquiry will be needed to show whether the approach suggested here can be maintained.

7 Conclusion

Appositive relatives differ from restrictive relatives in several interesting ways. I have reviewed differences with respect to possible antecedents, scope, relative elements, and so on. However,

[58] If I am correct that apposition is specifying coordination, it follows that circumnominal (or ''internally headed'') relatives and correlatives cannot be appositive, either. Concerning the latter, Grosu and Landman (1998) show that they are maximalizing; therefore, they are not appositive. Nevertheless, Lehmann (1984:279) assumes that there are examples of correlative appositive free relatives, for example, in German and Latin. However, this must be a mistake; the examples he mentions are clearly parenthetical sentences. For instance, they can be interjected at various positions in the sentence, whereas a true correlative is left-peripheral in the matrix. A relevant example from Dutch is (i).

(i) . . . dat hij— wat benadrukt moet worden— daartoe niet verplicht was.
. . . that he— what emphasized must be— there-to not obliged was
' . . . that he—which must be emphasized—was not obliged to do that.'

As for circumnominal appositive relatives, Lehmann (1984:278) states that they do not occur. For Dagbani, Navajo, and Diegueño, this is explicitly assured. A potential problem may be Mohave, in which circumnominal appositive relatives appear to be attested. In addition, Culy (1990:251–254) mentions some rare examples from Dogon. However, in all these examples the antecedent is in first position. Therefore, I agree with Lehmann that they are not convincing instances of circumnominal appositive relatives. A Mohave example is (ii), taken from Lehmann 1984:112. (*DS* in the gloss means that the subject is deceased.)

(ii) ʔin^{y}ep ʔ-intay-n^{y} ʔič su:paw mat-čəpe-č n^{y}-ču:ʔe:-m ʔ-sək^{w}il^{y}-k-ə
1SG.OBL POSS1-mother-DEF something know REFL-outstanding-NOM OBJ1-SUBJ3-teach-DS SBJ1-sew-REAL-EMPH
'My mother, who knows a lot, has taught me to sew.'

Considering that almost all languages with circumnominal relatives use one or more (secondary) relativization strategies of another main type—that is, postnominal, prenominal, or correlative—I think it is possible that the problematic examples at hand are reanalyzed as postnominal relative constructions, which, as usual, can be appositive.

there are also important similarities. Not all of these are generally acknowledged. For instance, I have shown that appositive relatives can be extraposed and stacked. There are a large number of competing analyses of appositive relativization in the literature, which I have ordered and briefly evaluated. I have argued that apposition in general is specifying coordination to an antecedent. This allows us to generalize over appositions and appositive relatives. Appositive relatives are extended appositions. To be precise, they are false free relatives (with an empty head) that are in apposition to the antecedent. Clearly, an appositive relative is different from a true free relative; neither can it be a bare CP. I have called the approach *CFR*, a name that refers to coordination, free relatives, and raising. It implies constituency of the antecedent plus the appositive relative. The antecedent is in the first conjunct, the free relative in the second. Within the false free relative, there is promotion of the empty head NP—which can be made overt in some cases (i.e., after the combination of N with the external D into a pronoun). It is this element that refers to the overt antecedent—the relative pronoun does so only indirectly. As in restrictive relatives, the relative pronoun is analyzed as a relative determiner of the head NP.

Thus, the internal syntactic system of relativization can be applied generally. I have used a variant of the promotion theory here. This, I believe, is an important result. It is the context that provides the means to differentiate between semantic subtypes of relatives. Specifically, I have shown that the configuration in which an appositive relative occurs—namely, specifying coordination—explains why its behavior deviates from that of restrictive relatives in several respects. I have construed the analysis on the basis of data from the Germanic and Romance languages, but I have tentatively concluded that it may hold universally; if so, one of the major predictions is that the appositive strategy implies a postnominal relative construction.

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